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FILE COVERS 1967 - 25 Jan 2001 VOL 134 ISS 5
FILE LAST UPDATED: 24 Jan 2001 (20010124/ED)

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=> d stat que

L2 24 SEA FILE=HCAPLUS ("VIND JESPER"/AU OR "VIND JESPER"/IN)
L3 146062 SEA FILE=HCAPLUS FUNG? OR POLYNUCLEOTIDE?
L4 14 SEA FILE=HCAPLUS L2 AND L3

=> d ibib abs hitrn 14 1-14

L4 ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:50780 HCAPLUS
TITLE: Glucoamylase variant
INVENTOR(S): Nielsen, Bjarne Ronfeldt; Svendsen, Allan; Pedersen, Henrik; Vind, Jesper; Hendriksen, Hanne Vang; Frandsen, Torben Peter
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.
SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001004273	A2	20010118	WO 2000-DK373	20000707

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Page 1

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: DK 1999-999 19990709

AB The invention relates to a variant of a parent **fungal** glucoamylase, which exhibits altered properties, in particular improved thermal stability and/or increased specific activity.

L4 ANSWER 2 OF 14 HCPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:608878 HCPLUS

DOCUMENT NUMBER: 133:188889

TITLE: Fungal cells with inactivated DNA mismatch repair system and their use as cloning and expression hosts

INVENTOR(S): Borchert, Torben Vedel; Christiansen, Lars; Vind, Jesper

PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.

SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000050567	A1	20000831	WO 2000-DK63	20000217
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: DK 1999-253 19990224

AB A process for making DNA libraries in filamentous **fungal** cells using a novel cloned gene involved in the mismatch repair system of filamentous fungal cells is described. By suppressing mismatch repair, the loss of sequence diversity is prevented. An electrophoretic mobility shift assay for mismatch repair activity is described. A mismatch repair gene, msh2, of Aspergillus oryzae was cloned using PCR with primers derived from conserved sequences of other mismatch repair genes to generate a probe is described. Methods of inactivating the endogenous msh2 gene and the development of vectors using it are also described.

REFERENCE COUNT: 5

REFERENCE(S):
 (1) Huber, D; Database SWISS-PROT 1998
 (2) Maxygen Inc; WO 9831837 A1 1998 HCPLUS

- (3) Setratech; WO 9007576 A1 1990 HCPLUS
- (4) Setratech; WO 9705268 A1 1997 HCPLUS
- (5) Setratech S A R L; WO 9737011 A1 1997 HCPLUS

L4 ANSWER 3 OF 14 HCPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 2000:401977 HCPLUS
 DOCUMENT NUMBER: 133:39882
 TITLE: Glucoamylases with N-terminal extensions displaying improved thermostability and their uses
 INVENTOR(S): Nielsen, Bjarne Ronfeldt; Svendsen, Allan; Bojsen, Kirsten; Vind, Jesper; Pedersen, Henrik
 PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.
 SOURCE: PCT Int. Appl., 61 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000034452	A1	20000615	WO 1999-DK686	19991207
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:			DK 1998-1616	19981207
			DK 1999-409	19990324

AB The invention relates to fungal glucoamylase with N-terminal extensions which exhibit improved thermal stability. Thus, N-terminal extended Aspergillus niger glucoamylase G2 variants were prepd. and their enhanced thermostability demonstrated.

REFERENCE COUNT: 4
 REFERENCE(S):

- (1) Cetus Corporation; WO 8402921 A3 1984 HCPLUS
- (2) Institut Fur Pflanzengenetik und Kulturpflanzenforschung; DE 4425058 A1 1996 HCPLUS
- (3) National Research Council of Canada; EP 0828002 A2 1998 HCPLUS
- (4) Novo Nordisk A/S; WO 9704078 1997 HCPLUS

L4 ANSWER 4 OF 14 HCPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 2000:384391 HCPLUS
 DOCUMENT NUMBER: 133:39878
 TITLE: Lipase variants for use in baking or detergents and method for preparing lipase variants
 INVENTOR(S): Bojsen, Kirsten; Svendsen, Allan; Fuglsang, Klaus Crone; Shamkant, Anant Patkar; Borch, Kim; Vind, Jesper; Petri, Andreas; Glad, Sanne Schroder; Budolfsen, Gitte
 PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.

SOURCE: PCT Int. Appl., 90 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000032758	A1	20000608	WO 1999-DK664	19991129
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.:	DK 1998-1572	19981127
	US 1998-111430	19981208
	DK 1999-391	19990322
	US 1999-126914	19990329
	DK 1999-1481	19991015
	US 1999-160735	19991022

AB The substrate specificity of a lipolytic enzyme can be modified by making alterations to the amino acid sequence in a defined region of the lipolytic enzyme, so as to increase the level of a desired activity or to decrease the level of an undesired activity. Thus, the inventors have developed lipolytic enzyme variants with a modified amino acid sequence with a substrate specificity which can be tailored for specific uses. Thus, many variants of *Humicola lanuginosa* and of *Fusarium oxysporum* lipases were prep'd. with recombinant *Saccharomyces cerevisiae*. Variants were prep'd. which had phospholipase activity, which had increased specificity for long-chain or for short-chain fatty acids, which had hydrolytic activity towards digalactosyldiglyceride, and which had increased or decreased pH optima. Use of some of the variants in vegetable oil degumming and in baking was demonstrated.

REFERENCE COUNT: 10

REFERENCE(S):

- (1) Anon; WO 9205249 HCPLUS
 - (2) Anon; WO 9401541 HCPLUS
 - (3) Atomi; Proc World Congr Int Soc Fat Res 1996, V1, P49 HCPLUS
 - (5) Bachmatova, I; Biologija 1995, 1-2, P57 HCPLUS
 - (8) Novo Nordisk AS; WO 9205249 A1 1992 HCPLUS
- ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 14 HCPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:383958 HCPLUS

DOCUMENT NUMBER: 133:34291

TITLE: Anti-dandruff composition comprising an antifungal polypeptide

INVENTOR(S): Vind, Jesper; Sorensen, Niels Henrik

PATENT ASSIGNEE(S): Novo Nordisk A/s, Den.

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000032220	A1	20000608	WO 1999-DK659	19991126
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: DK 1998-1579 19981130

AB The present invention relates to an anti-dandruff compn. comprising an antifungal polypeptide, to the use of an antifungal polypeptide for the treatment or prophylaxis of dandruff, to a method for the treatment or prophylaxis of dandruff, and to the use of an antifungal polypeptide for the prepn. of a compn. for the treatment or prophylaxis of dandruff. The antifungal polypeptide, a 51 amino acid-contg. peptide, obtained from Aspergillus species, efficiently impedes the growth of the yeast P. ovale, even in low concns. Shampoo compns. contg. the peptide are given.

REFERENCE COUNT: 2

REFERENCE(S):
 (1) Beiersdorf Ag; WO 9722624 A2 1997 HCPLUS
 (2) Novo Nordisk AS; WO 9401459 A1 1994 HCPLUS

L4 ANSWER 6 OF 14 HCPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:291226 HCPLUS

DOCUMENT NUMBER: 132:319501

TITLE: Methods of constructing and screening a DNA library of interest in filamentous fungal cells

INVENTOR(S): Vind, Jesper

PATENT ASSIGNEE(S): Novo Nordisk A/s, Den.

SOURCE: PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000024883	A1	20000504	WO 1999-DK552	19991013
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

AU 9961885	A1	20000515	AU 1999-61885	19991013
PRIORITY APPLN. INFO.:			DK 1998-1375	19981026
			DK 1999-718	19990525
			WO 1999-DK552	19991013

AB The invention provides a method of constructing and screening a library of **polynucleotide** sequences of interest in filamentous **fungal** cells by use of an episomal replicating **AMA1**-based plasmid vector, thus achieving a high frequency of transformation and a stable and std. uniformly high level of gene expression.

REFERENCE COUNT: 4

- REFERENCE(S):
- (1) Alekseenko, A; Fungal Genetics and Biology 1997, V21, P373 HCAPLUS
 - (2) Alekseenko, A; Mol Gen Genet 1996, V253, P242 HCAPLUS
 - (3) Alexei, A; Molecular Microbiology 1996, V20(2), P427
 - (4) Gems, D; Curr Genet 1993, V24, P520 HCAPLUS

L4 ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:68546 HCAPLUS

DOCUMENT NUMBER: 132:104698

TITLE: Glucoamylase variants with improved specific activity and/or thermostability

INVENTOR(S): Nielsen, Bjarne Ronfeldt; Svendsen, Allan; Pedersen, Henrik; Vind, Jesper; Hendriksen, Hanne Vang; Frandsen, Torben Peter

PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.

SOURCE: PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000004136	A1	20000127	WO 1999-DK392	19990709
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9947699	A1	20000207	AU 1999-47699	19990709
PRIORITY APPLN. INFO.:			DK 1998-937	19980715
			DK 1998-1667	19981217
			WO 1999-DK392	19990709

AB The invention relates to a variant of a parent **fungal** glucoamylase, which exhibits improved thermal stability and/or increased specific activity using saccharide substrates. The x-ray structure and/or model-build structure of *Aspergillus awamori* variant X100 glucoamylase was subjected to mol. dynamics simulations to identify regions important for temp.-stable activity. The truncated G1 glucoamylase from *Aspergillus*

niger was modified by (1) random mutagenesis, (2) localized random, doped mutagenesis, or (3) PCR shuffling spiked with DNA oligonucleotides in order to prep. variants having improved thermostability compared to the parent enzyme. Such glucoamylase variants have use in starch saccharification, oligosaccharide prodn., specialty syrups, producing ethanol for fuel, producing beverages, and producing org. compds. (citric acid, ascorbic acid, lysine, glutamic acid).

REFERENCE COUNT:

4

REFERENCE(S):

- (1) Chen, H; Protein Eng (ENGLAND) 1995, V8(6), P575 HCPLUS
- (2) Fierobe, H; Biochemistry (UNITED STATES) 1996, V35(26), P8696 HCPLUS
- (3) Iowa State University Research Foundation Inc; WO 9803639 A1 1998 HCPLUS
- (4) Novo Nordisk AS; WO 9200381 A1 1992 HCPLUS

L4 ANSWER 8 OF 14 HCPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:239286 HCPLUS

DOCUMENT NUMBER: 131:16292

TITLE: Direct evolution of a **fungal** peroxidaseAUTHOR(S): Cherry, Joel R.; Lamsa, Michael H.; Schneider, Palle;
Vind, Jesper; Svendsen, Allan; Jones, Aubrey;
Pedersen, Anders H.

CORPORATE SOURCE: Novo Nordisk Biotech, Inc., Davis, CA, 95616, USA

SOURCE: Nat. Biotechnol. (1999), 17(4), 379-384

CODEN: NABIF9; ISSN: 1087-0156

PUBLISHER: Nature America

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The Coprinus cinereus (CIP) heme peroxidase was subjected to multiple rounds of directed evolution in an effort to product a mutant suitable for use as a dye transfer inhibitor in laundry detergent. The wild-type peroxidase is rapidly inactivated under laundry conditions due to the high pH (10.5), high temp. (50.degree.C), and high peroxide concn. (5-10 mM). Peroxidase mutants were initially generated using two parallel approaches: site-directed mutagenesis based on structure-function considerations, and error-prone PCR to create random mutations. Mutations were expressed in Saccharomyces cerevisiae and screened for improve stability by measuring residual activity after incubation under conditions mimicking those in a washing machine. Manually combining mutations from the site-directed and random approaches led to a mutant with 110 times the thermal stability and 2.8 times the oxidative stability of wild-type CIP. In the final two rounds, mutants were randomly recombined by using the efficient yeast homologous recombination system to shuffle point mutations among a large no. of parents. This in vivo shuffling led to the most dramatic improvements in oxidative stability, yielding a mutant with 174 times the thermal stability and 100 times the oxidative stability of wild-type CIP.

REFERENCE COUNT:

19

REFERENCE(S):

- (1) Abelskov, A; Biochemistry 1997, V36, P9453 HCPLUS
- (2) Cannon, J; Molec Cell Biol 1987, V7, P2653 HCPLUS
- (3) Crameri, A; Nature 1998, V391, P288 HCPLUS
- (5) Kunishima, N; J Mol Biol 1994, V235, P331 HCPLUS
- (6) Landt, O; Gene 1990, V96, P125 HCPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 14 HCPLUS COPYRIGHT 2001 ACS

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ACCESSION NUMBER: 1998:640366 HCPLUS
 DOCUMENT NUMBER: 129:255993
 TITLE: An in vitro primer extension method for construction
 of a DNA library of overlapping sequences
 INVENTOR(S): Vind, Jesper
 PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.
 SOURCE: PCT Int. Appl., 40 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9841653	A1	19980924	WO 1998-DK104	19980318
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9866115	A1	19981012	AU 1998-66115	19980318
EP 973940	A1	20000126	EP 1998-907911	19980318
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
BR 9808368	A	20000523	BR 1998-8368	19980318
US 6159687	A	20001212	US 1998-40697	19980318
DK 1997-307 19970318				
DK 1997-434 19970417				
DK 1997-625 19970530				
US 1997-44836 19970425				
US 1997-53012 19970624				
WO 1998-DK104 19980318				

PRIORITY APPLN. INFO.:
 AB A method of constructing libraries of overlapping sequences using rounds
 of primer extension to is described. A first round of primer extension is
 used to generate extended primers that are sep'd. from the template DNA.
 The template is then shifted by using the extended primers as both primers
 and templates or by repeating the first stage of the process. The process
 is then repeated as often as necessary to obtain the desired bank.
 Optionally the polynucleotides are amplified in a a std. PCR
 reaction with specific primers to selectively amplify homologous
 polynucleotides of interest. The method is particularly intended
 to obtain sequences encoding specific domains of proteins for use in
 protein engineering by domain shuffling. Error-prone amplification can be
 used to generate pools of variants. The use of the method on pools of
 Humicola lanuginosa lipase variants to generate new variants is
 demonstrated.

L4 ANSWER 10 OF 14 HCPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1997:240584 HCPLUS
 DOCUMENT NUMBER: 126:222277
 TITLE: Recombinant lipases with C- and/or N-terminal
 extensions and their use in detergents
 INVENTOR(S): Fuglsang, Claus Crone; Okkels, Jens Sigurd; Petersen,

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PATENT ASSIGNEE(S): Dorte Aaby; Patkar, Shamkant Anant; Thellersen, Marianne; Vind, Jesper; Halkier, Torben; Joergensen, Steen Troels; et al.
 Novo Nordisk A/s, Den.; Fuglsang, Claus Crone; Okkels, Jens Sigurd; Petersen, Dorte Aaby; Patkar, Shamkant Anant; Thellersen, Marianne; Vind, Jesper; Halkier, Torben

SOURCE: PCT Int. Appl., 191 pp.

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9704079	A1	19970206	WO 1996-DK322	19960712
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
AU 9664141	A1	19970218	AU 1996-64141	19960712
EP 839186	A1	19980506	EP 1996-923878	19960712
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
CN 1193346	A	19980916	CN 1996-196371	19960712
			DK 1995-832	19950714
			DK 1995-1013	19950913
			DK 1995-1096	19950929
			DK 1995-1306	19951121
			US 1996-11634	19960214
			DK 1996-372	19960401
			US 1996-20461	19960507
			WO 1996-DK322	19960712

PRIORITY APPLN. INFO.:
 AB The invention relates to a modified enzyme with lipolytic activity recovered from a filamentous fungi or a bacteria having one or more peptide addns. at the N-terminal and/or the C-terminal ends in comparison to the parent enzyme. The peptide addns. significantly improve the washing performance of the lipase. Further, the invention relates to a DNA sequence encoding said modified enzyme, a vector comprising said DNA sequence, a host cell harboring said DNA sequence or said vector, and a process for producing said modified enzyme with lipolytic activity. The lipase variants are useful in detergent compns. Numerous lipase variants contg. substitution mutations and C- and/or N-terminal addns. were prep'd. with recombinant Aspergillus oryzae or with Escherichia coli. The addn. of SPIRR to the N-terminus of Humicola lanuginosa lipase increased the wash performance relative to the parent enzyme twofold.

L4 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1997:220628 HCAPLUS
 DOCUMENT NUMBER: 126:208956
 TITLE: Recombinant lipases with C- and/or N-terminal extensions and their use in detergents
 INVENTOR(S): Fuglsang, Claus Crone; Okkels, Jens Sigurd; Petersen, Dorte Aaby; Patkar, Shamkant Anant; Thellersen,

PATENT ASSIGNEE(S): Marianne; Vind, Jesper; Halkier, Torben;
 Joergensen, Steen Troels; et al.
 Novo Nordisk A/s, Den.; Fuglsang, Claus Crone; Okkels,
 Jens Sigurd; Pertersen, Dorte Aaby; Patkar, Shamkant
 Anant; Thellersen, Marianne; Vind, Jesper; Halkier,
 Torben

SOURCE: PCT Int. Appl., 197 pp.

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9704078	A1	19970206	WO 1996-DK321	19960712
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
AU 9664140	A1	19970218	AU 1996-64140	19960712
CN 1193346	A	19980916	CN 1996-196371	19960712
PRIORITY APPLN. INFO.:				
		DK 1995-832	19950714	
		DK 1995-1013	19950913	
		DK 1995-1096	19950929	
		DK 1995-1306	19951121	
		US 1996-11634	19960214	
		DK 1996-372	19960401	
		US 1996-20461	19960507	
		US 1996-20416	19960507	
		WO 1996-DK321	19960712	

AB The invention relates to a modified enzyme with lipolytic activity recovered from a filamentous fungi or a bacteria having one or more peptide addns. at the N-terminal and/or the C-terminal ends in comparison to the parent enzyme. The peptide addns. significantly improve the washing performance of the lipase. Further, the invention relates to a DNA sequence encoding said modified enzyme, a vector comprising said DNA sequence, a host cell harboring said DNA sequence or said vector, and a process for producing said modified enzyme with lipolytic activity. The lipase variants are useful in detergent compns. Numerous lipase variants contg. substitution mutations and C- and/or N-terminal addns. were prep'd. with recombinant Aspergillus oryzae or with Escherichia coli. The addn. of SPIRR to the N-terminus of Humicola lanuginosa lipase increased the wash performance relative to the parent enzyme twofold.

L4 ANSWER 12 OF 14 HCPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1995:400053 HCPLUS
 DOCUMENT NUMBER: 122:181667
 TITLE: Disulfide bonds and glycosylation in fungal peroxidases
 AUTHOR(S): Limongi, Paola; Kjalke, Marianne; Vind, Jesper
 ; Tams, Jeppe W.; Johansson, Tomas; Welinder, Karen G.
 CORPORATE SOURCE: Department of Protein Chemistry, Univ. of Copenhagen,
 Copenhagen, DK-1353, Den.

SOURCE: Eur. J. Biochem. (1995), 227(1/2), 270-6
 CODEN: EJBCAI; ISSN: 0014-2956

DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Four conserved disulfide bonds and N-linked and O-linked glycans of extracellular fungal peroxidases have been identified from studies of a lignin and a manganese peroxidase from *Trametes versicolor*, and from *Coprinus cinereus* peroxidase (CIP) and recombinant *C. cinereus* peroxidase (rCIP) expressed in *Aspergillus oryzae*. The eight cysteine residues are linked 1-3, 2-7, 4-5 and 6-8, and are located differently from the four conserved disulfide bridges present in the homologous plant peroxidases. CIP and rCIP were identical in their glycosylation pattern, although the extent of glycan chain heterogeneity depended on the form. batch. CIP and rCIP have one N-linked glycan composed only of GlcNAc and Man at residue Asn142, and two O-linked glycans near the C-terminus. The major glycoform consists of single Man residues at Thr331 and at Ser338. *T. versicolor* lignin isoperoxidase TvLP10 contains a single N-linked glycan composed of (GlcNAc)2Man5 bound to Asn103, whereas (GlcNAc)2Man3 was found in *T. versicolor* manganese isoperoxidase TvMP2 at the same position. In addn., mass spectrometry of the C-terminal peptide of TvMP2 indicated the presence of five Man residues in O-linked glycans. No phosphate was found in these fungal peroxidases.

L4 ANSWER 13 OF 14 HCPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1995:50558 HCPLUS
 DOCUMENT NUMBER: 122:48019
 TITLE: Expression cloning, purification and characterization of a .beta.-1,4-mannanase from *Aspergillus aculeatus*
 AUTHOR(S): Christgau, Stephan; Kauppinen, Sakari; Vind, Jesper; Kofod, Lene V.; Dalboege, Henrik
 CORPORATE SOURCE: GeneExpress, Novo Nordisk A/S, Copenhagen, DK-2100, Den.
 SOURCE: Biochem. Mol. Biol. Int. (1994), 33(5), 917-25
 CODEN: BMBIES
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A cDNA library from the filamentous fungus *A. aculeatus* was constructed in the yeast expression vector pYES2.0 and used to isolate 57 full length cDNAs encoding endo-.beta.-1,4-mannanase (I) by expression in *S. cerevisiae*. The pos. clones were identified on agar plates contg. 0.2% azurine-dyed crosslinked mannan by the formation of blue halos around the colonies. All clones represented transcripts of the same I gene (manl). The gene was subcloned into an *Aspergillus* expression vector and transformed into *A. oryzae* for overexpression and purifn. of the enzyme. Recombinant I had a mol. wt. of 45 kDa, a pI of 4.5, a pH optimum of pH 5.0, and a temp. optimum of 60-70.degree..

L4 ANSWER 14 OF 14 HCPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1994:453072 HCPLUS
 DOCUMENT NUMBER: 121:53072
 TITLE: NMR studies of recombinant *Coprinus* peroxidase and three site-directed mutants. Implications for peroxidase substrate binding
 AUTHOR(S): Veitch, Nigel C.; Tams, Jeppe W.; Vind, Jesper; Dalboege, Henrik; Welinder, Karen G.
 CORPORATE SOURCE: Jodrell Lab., R. Bot. Gardens, Richmond, UK

SOURCE: Eur. J. Biochem. (1994), 222(3), 909-18
CODEN: EJBCAI; ISSN: 0014-2956

DOCUMENT TYPE: Journal
LANGUAGE: English

AB Proton NMR spectroscopy has been used to characterize and compare wild-type **fungal** and recombinant *Coprinus cinereus* peroxidase (CIP) and three mutants in which Gly156 and/or Asn157 was replaced by Phe. Anal. of one- and two-dimensional NMR spectra of recombinant CIP was undertaken for comparison with the **fungal** enzyme and in order to est. a meaningful basis for soln. studies of CIP mutants. Proton resonance assignments of heme and heme-linked residues obtained for the cyanide-ligated form of recombinant CIP revealed a high degree of spectral similarity with those of lignin and manganese-dependent peroxidases and extend previously reported NMR data for **fungal** CIP. The three mutants examd. by NMR spectroscopy comprised site-specific substitutions made to a region of the structure believed to form part of the peroxidase heme group access channel for substrate and ligand mols. Proton resonances of the arom. side-chains of Phe156 and Phe157 were found to have similar spectral characteristics to those of two phenylalanine residues known to be involved in the binding of arom. donor mols. to the plant peroxidase, horseradish peroxidase isoenzyme C. The results are discussed in the context of complementary reactivity studies on the mutants in order to develop a more detailed understanding of arom. donor mol. binding to **fungal** and plant peroxidases.

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ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

Ponnalun 09/426,038

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI DK 1999-999 19990709

L3 ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2001 ACS

AN 2000:608878 HCAPLUS

DN 133:188889

TI **Fungal** cells with inactivated DNA mismatch repair system and
their use as cloning and expression hosts

IN Borchert, Torben Vedel; Christiansen, Lars; Vind, Jesper

PA Novo Nordisk A/S, Den.

SO PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2000050567	A1	20000831	WO 2000-DK63	20000217
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W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KR, LZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI DK 1999-253 19990224

RE.CNT 5

RE

- (1) Huber, D; Database SWISS-PROT 1998
- (2) Maxygen Inc; WO 9831837 A1 1998 HCAPLUS
- (3) Setratech; WO 9007576 A1 1990 HCAPLUS
- (4) Setratech; WO 9705268 A1 1997 HCAPLUS
- (5) Setratech S A R L; WO 9737011 A1 1997 HCAPLUS

L3 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2001 ACS

AN 2000:401977 HCAPLUS

DN 133:39882

TI Glucoamylases with N-terminal extensions displaying improved
thermostability and their uses

IN Nielsen, Bjarne Ronfeldt; Svendsen, Allan; Bojsen, Kirsten; Vind,
Jesper; Pedersen, Henrik

PA Novo Nordisk A/S, Den.

SO PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2000034452	A1	20000615	WO 1999-DK686	19991207
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W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,

M. Smith 308-3278

Page 14

IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
 MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
 SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI DK 1998-1616 19981207
 DK 1999-409 19990324

RE.CNT 4

- RE
- (1) Cetus Corporation; WO 8402921 A3 1984 HCAPLUS
 - (2) Institut Fur Pflanzengenetik und Kulturpflanzenforschung; DE 4425058 A1 1996 HCAPLUS
 - (3) National Research Council of Canada; EP 0828002 A2 1998 HCAPLUS
 - (4) Novo Nordisk A/S; WO 9704078 1997 HCAPLUS

L3 ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2001 ACS
 AN 2000:384391 HCAPLUS
 DN 133:39878
 TI Lipase variants for use in baking or detergents and method for preparing lipase variants
 IN Bojsen, Kirsten; Svendsen, Allan; Fuglsang, Klaus Crone; Shamkant, Anant Patkar; Borch, Kim; Vind, Jesper; Petri, Andreas; Glad, Sanne Schroder; Budolfsen, Gitte
 PA Novo Nordisk A/S, Den.
 SO PCT Int. Appl., 90 pp.
 CODEN: PIXXD2
 DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000032758	A1	20000608	WO 1999-DK664	19991129
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRAI DK 1998-1572 19981127
 US 1998-111430 19981208
 DK 1999-391 19990322
 US 1999-126914 19990329
 DK 1999-1481 19991015
 US 1999-160735 19991022

RE.CNT 10

RE

- (1) Anon; WO 9205249 HCAPLUS
- (2) Anon; WO 9401541 HCAPLUS
- (3) Atomij; Proc World Congr Int Soc Fat Res 1996, V1, P49 HCAPLUS
- (5) Bachmatova, I; Biologija 1995, 1-2, P57 HCAPLUS
- (8) Novo Nordisk AS; WO 9205249 A1 1992 HCAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2001 ACS
 AN 2000:383958 HCAPLUS
 DN 133:34291
 TI Anti-dandruff composition comprising an antifungal polypeptide
 IN Vind, Jesper; Sorensen, Niels Henrik
 PA Novo Nordisk A/s, Den.
 SO PCT Int. Appl., 54 pp.
 CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000032220	A1	20000608	WO 1999-DK659	19991126
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRAI DK 1998-1579 19981130

RE.CNT 2

RE

- (1) Beiersdorf Ag; WO 9722624 A2 1997 HCAPLUS
- (2) Novo Nordisk AS; WO 9401459 A1 1994 HCAPLUS

L3 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2001 ACS
 AN 2000:291226 HCAPLUS

DN 132:319501

TI Methods of constructing and screening a DNA library of interest in
filamentous fungal cells

IN Vind, Jesper

PA Novo Nordisk A/s, Den.

SO PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000024883	A1	20000504	WO 1999-DK552	19991013
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

AU 9961885 A1 20000515 AU 1999-61885 19991013

PRAI DK 1998-1375 19981026
 DK 1999-718 19990525
 WO 1999-DK552 19991013

RE.CNT 4

RE

- (1) Alekseenko, A; Fungal Genetics and Biology 1997, V21, P373 HCAPLUS
- (2) Alekseenko, A; Mol Gen Genet 1996, V253, P242 HCAPLUS
- (3) Alexei, A; Molecular Microbiology 1996, V20(2), P427
- (4) Gems, D; Curr Genet 1993, V24, P520 HCAPLUS

L3 ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2001 ACS

AN 2000:68546 HCAPLUS

DN 132:104698

TI Glucoamylase variants with improved specific activity and/or thermostability

IN Nielsen, Bjarne Ronfeldt; Svendsen, Allan; Pedersen, Henrik; Vind, Jesper; Hendriksen, Hanne Vang; Frandsen, Torben Peter

PA Novo Nordisk A/S, Den.

SO PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000004136	A1	20000127	WO 1999-DK392	19990709
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	AU 9947699	A1	20000207	AU 1999-47699	19990709
PRAI	DK 1998-937		19980715		
	DK 1998-1667		19981217		
	WO 1999-DK392		19990709		

RE.CNT 4

RE

- (1) Chen, H; Protein Eng (ENGLAND) 1995, V8(6), P575 HCAPLUS
- (2) Fierobe, H; Biochemistry (UNITED STATES) 1996, V35(26), P8696 HCAPLUS
- (3) Iowa State University Research Foundation Inc; WO 9803639 A1 1998 HCAPLUS
- (4) Novo Nordisk AS; WO 9200381 A1 1992 HCAPLUS

L3 ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2001 ACS

AN 1999:239286 HCAPLUS

DN 131:16292

TI Direct evolution of a fungal peroxidase

AU Cherry, Joel R.; Lamsa, Michael H.; Schneider, Palle; Vind, Jesper; Svendsen, Allan; Jones, Aubrey; Pedersen, Anders H.

CS Novo Nordisk Biotech, Inc., Davis, CA, 95616, USA

SO Nat. Biotechnol. (1999), 17(4), 379-384

CODEN: NABIF9; ISSN: 1087-0156

PB Nature America

DT Journal

LA English

RE.CNT 19

RE

- (1) Abelskov, A; Biochemistry 1997, V36, P9453 HCPLUS
- (2) Cannon, J; Molec Cell Biol 1987, V7, P2653 HCPLUS
- (3) Crameri, A; Nature 1998, V391, P288 HCPLUS
- (5) Kunishima, N; J Mol Biol 1994, V235, P331 HCPLUS
- (6) Landt, O; Gene 1990, V96, P125 HCPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 14 HCPLUS COPYRIGHT 2001 ACS

AN 1998:640366 HCPLUS

DN 129:255993

TI An in vitro primer extension method for construction of a DNA library of overlapping sequences

IN Vind, Jesper

PA Novo Nordisk A/S, Den.

SO PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9841653	A1	19980924	WO 1998-DK104	19980318
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9866115	A1	19981012	AU 1998-66115	19980318
	EP 973940	A1	20000126	EP 1998-907911	19980318
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
	BR 9808368	A	20000523	BR 1998-8368	19980318
	US 6159687	A	20001212	US 1998-40697	19980318
PRAI	DK 1997-307		19970318		
	DK 1997-434		19970417		
	DK 1997-625		19970530		
	US 1997-44836		19970425		
	US 1997-53012		19970624		
	WO 1998-DK104		19980318		

L3 ANSWER 10 OF 14 HCPLUS COPYRIGHT 2001 ACS

AN 1997:240584 HCPLUS

DN 126:222277

TI Recombinant lipases with C- and/or N-terminal extensions and their use in detergents

IN Fuglsang, Claus Crone; Okkels, Jens Sigurd; Petersen, Dorte Aaby; Patkar, Shamkant Anant; Thellersen, Marianne; Vind, Jesper; Halkier, Torben; Joergensen, Steen Troels; et al.

PA Novo Nordisk A/s, Den.; Fuglsang, Claus Crone; Okkels, Jens Sigurd; Petersen, Dorte Aaby; Patkar, Shamkant Anant; Thellersen, Marianne; Vind,

SO Jesper; Halkier, Torben
 PCT Int. Appl., 191 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9704079	A1	19970206	WO 1996-DK322	19960712
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
	AU 9664141	A1	19970218	AU 1996-64141	19960712
	EP 839186	A1	19980506	EP 1996-923878	19960712
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
	CN 1193346	A	19980916	CN 1996-196371	19960712
PRAI	DK 1995-832		19950714		
	DK 1995-1013		19950913		
	DK 1995-1096		19950929		
	DK 1995-1306		19951121		
	US 1996-11634		19960214		
	DK 1996-372		19960401		
	US 1996-20461		19960507		
	WO 1996-DK322		19960712		

L3 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2001 ACS
 AN 1997:220628 HCAPLUS
 DN 126:208956
 TI Recombinant lipases with C- and/or N-terminal extensions and their use in detergents
 IN Fuglsang, Claus Crone; Okkels, Jens Sigurd; Pertersen, Dorte Aaby; Patkar, Shamkant Anant; Thellersen, Marianne; Vind, Jesper; Halkier, Torben; Joergensen, Steen Troels; et al.
 PA Novo Nordisk A/s, Den.; Fuglsang, Claus Crone; Okkels, Jens Sigurd; Pertersen, Dorte Aaby; Patkar, Shamkant Anant; Thellersen, Marianne; Vind, Jesper; Halkier, Torben
 SO PCT Int. Appl., 197 pp.
 CODEN: PIXXD2

DT Patent
 LA English
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9704078	A1	19970206	WO 1996-DK321	19960712
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
	AU 9664140	A1	19970218	AU 1996-64140	19960712
	CN 1193346	A	19980916	CN 1996-196371	19960712
PRAI	DK 1995-832		19950714		

DK 1995-1013	19950913
DK 1995-1096	19950929
DK 1995-1306	19951121
US 1996-11634	19960214
DK 1996-372	19960401
US 1996-20461	19960507
US 1996-20416	19960507
WO 1996-DK321	19960712

L3 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:400053 HCAPLUS
DN 122:181667
TI Disulfide bonds and glycosylation in fungal peroxidases
AU Limongi, Paola; Kjalke, Marianne; Vind, Jesper; Tams, Jeppe W.; Johansson, Tomas; Welinder, Karen G.
CS Department of Protein Chemistry, Univ. of Copenhagen, Copenhagen, DK-1353, Den.
SO Eur. J. Biochem. (1995), 227(1/2), 270-6
CODEN: EJBCAI; ISSN: 0014-2956
DT Journal
LA English

L3 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:50558 HCAPLUS
DN 122:48019
TI Expression cloning, purification and characterization of a .beta.-1,4-mannanase from Aspergillus aculeatus
AU Christgau, Stephan; Kauppinen, Sakari; Vind, Jesper; Kofod, Lene V.; Dalboege, Henrik
CS GeneExpress, Novo Nordisk A/S, Copenhagen, DK-2100, Den.
SO Biochem. Mol. Biol. Int. (1994), 33(5), 917-25
CODEN: BMBIES
DT Journal
LA English

L3 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2001 ACS
AN 1994:453072 HCAPLUS
DN 121:53072
TI NMR studies of recombinant Coprinus peroxidase and three site-directed mutants. Implications for peroxidase substrate binding
AU Veitch, Nigel C.; Tams, Jeppe W.; Vind, Jesper; Dalboege, Henrik; Welinder, Karen G.
CS Jodrell Lab., R. Bot. Gardens, Richmond, UK
SO Eur. J. Biochem. (1994), 222(3), 909-18
CODEN: EJBCAI; ISSN: 0014-2956
DT Journal
LA English